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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,646	11/24/2003	Heini Zollinger	0115-032131	4696

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EXAMINER
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PARKER, FREDERICK JOHN

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/720,646	<b>Applicant(s)</b> ZOLLINGER, HEINI	
	<b>Examiner</b> Frederick J. Parker	<b>Art Unit</b> 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-16,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-16,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>21/5/06</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 103***

1. Claims 11,13-16,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al US 3801421 in view of Burley et al US 6021646.

Allen et al teaches a porous or permeable granular composite covering (which may be continuous and jointless, e.g. football field, col. 7, 48-51 which is a "sports facility") forming a surfacing, comprising a particulate rubber (e.g. SBR) bonded with a polymeric resin binder (col. 4, 37-62). The surfacing is formed with void space to permit drainage of rainwater due to the permeable nature of the composite (col. 6, 3-7), which prevents pressure build-up/ delamination, and provides a cushion-like feel to the composite. The porous/ permeable composite as described permits downward flow of water from the top surface due to gravity. The rubber particle- resin binder mixture may be continuously applied onto a surface followed by toweling/ tamping (which are compaction/ smoothing steps), or other shaping prior to curing (col. 6, 28-33 and col. 9, 1-6). Heated screed and rollers of claims 14-15 for compacting and texturizing are not explicitly cited. However, it is the Examiner's position that since Allen teaches toweling/ tamping steps, it would have been obvious to use other and known, functionally equivalent means such as a heated screed to provide an equivalent outcome in the process of Allen et al, absent a clear and convincing showing to the contrary. Applying depressions using an uneven pressure embossing step is not cited.

Burley teaches making flooring systems for sports facilities, and includes teaching that top surfaces may be provided with a textured finish using a heated roller or texture wheel embossing

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means, without limitation on the regularity of textures formed. The texturizing is stated to enhance traction of persons walking or running on the surfaces.

The references deal with the same subject matter: forming surfaces for sporting or related use with stated improvements as motivation to make the modifications. Since Allen suggests shaping the composite layer before curing, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Allen by incorporating shaping by mechanically texturizing the resultant surface as taught by Burley et al to provide the recognized improvement of enhanced grip/ traction of persons walking or running on the surfaces.

2. Claims 12,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al US 3801421 in view of Burley et al US 6021646 and further in view of Bull US 4897302.

Allen and Burley are cited for the same reasons previously discussed, which are incorporated herein. Specific particle size ranges of the claims are not cited.

Allen et al teaches on col. 5, 4-7 that particles are "typically" between  $\frac{1}{4}$ - $\frac{1}{2}$ " (about 6.4-12.5 mm) screen openings and retained on #30-40 screens (about 0.425-0.6 mm) and further Ex. 3 teaches particles less than 4.7 mm, which are slightly different from the claims. However, Bull teaches on col. 2, 5-25 the making of a similar porous structure made of a mixture of liquid (polyurethane) polymer binder and rubber particles (0.5-5 mm), the structure containing porous interstices to provide resiliency, and the advantage of improved grip on athletic surfaces. Thus Bull also teaches effective particle size ranges of rubber particles mixed with a polymer binder which provides effective porous surfacing composites. The particle sizes of Bull overlap those of Applicants' claims. The subject matter as a whole would have been obvious to one of ordinary

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skill in the art at the time the invention was made if the overlapping portion of the particle sizes disclosed by the reference were selected because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Wortheim* 191 USPQ 90. It is also noted Bull's upper particle size ranges overlap those of Allen et al which are also presented as effective to form void space to permit water drainage.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the process of Allen in view of Burley by incorporating the guidance on particle size of the rubber particles presented by Bull to provide rubber particle-polymer composites having porosity/ void space which permits drainage of water.

### ***Response to Arguments***

Applicants' amendments ( as reflected above) and arguments have been considered. Applicants argue Burley is a different covering for a sports facility than that of the prior art and instant claims. This is not persuasive because the reference teaches the concept of mechanically texturizing the sports floor to provide an uneven surface. Applicants cite a sandpaper or pebble-like effect is produced, and it is the Examiner's position that water wetting the floor would necessarily flow downward from the top surface into the depressions caused by whatever texturized feature is present since the texturizing would provide peaks and valleys. While the sports floor type may be different from that of Allen, the concept is nonetheless equally applicable to Allen given the suggestions of Allen col. 6. Allen expressly teaches forming texturized sports surfaces made of rubber particles and includes the step of "tamping, or otherwise shaping it" while also teaching that water drainage from the surface is beneficial (col.

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6, 3-33). Burley is also directed to the concept of texturizing sports surfaces and provides a means to do so, by mechanical texturizing using a heated roller or texture wheel. Thus, Burley provides a specific means to carry out the shaping and texturizing of Allen which would provide the improvements of enhanced grip/ traction of persons walking or running on the surfaces as well as the ability of surface water to drain downward. The claims 11-16,21,22 are therefore obvious in view of the cited prior art and the rejections are maintained.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

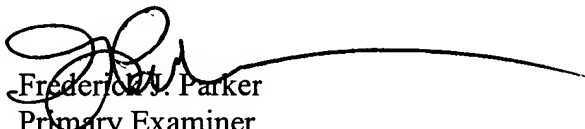
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Frederick W. Parker  
Primary Examiner  
Art Unit 1762

fjp